

REMARKS

Applicant would like to thank the Examiner for the thorough review of the present application. As discussed in detail below, the present claims include recitations that patentably distinguish the claimed invention over the cited references, taken individually or in combination. Based upon the following remarks, Applicant respectfully requests reconsideration of the present application and allowance of the pending claims.

Claim Amendments

Claims 1-8 were previously pending in the current application.

Applicant kindly requests the cancellation of claims 2, 3, 6 and 7.

Applicant kindly requests the consideration of newly added claims 9 and 10.

Claims 1, 4, 5 and 8 have been amended to add clarity and to further distinguish the claimed invention from the cited references. Distinguishing remarks are provided below.

Claims 2, 3, 6 and 7 have been cancelled because the general concepts incorporated in these claims have been added to amended independent claims 1 and 5.

Newly added claims 9 and 10 further distinguish the claimed invention from the cited references. Support for the newly added claims can be found in the specification at page 9, lines 1-10.

Claim Objections

Claim 1 was objected to because the term "VLAN" lacks the proper preceding article, "a". The claim has been amended to correct the informality.

Claim Rejections Under 35 U.S.C. § 112

Claims 2-4 and 6-8 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner noted that the term "the VLAN number" lacked proper antecedent basis. Independent claims 1 and 5 have been amended to include the term "a VLAN number", thus proper antecedent basis currently exists in claims 4 and 8. As previously noted, claims 2, 3, 6 and 7 have been canceled.

Claim Rejections Under 35 U.S.C. § 102(e)

Claims 1-8 were rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent Publication No. 2003/0152075-0000244, published in the name of Hawthorne, III et al. (hereinafter, "the Hawthorne publication").

Applicant respectfully submits that these rejections are overcome by the following arguments.

The Hawthorne Publication Does Not Teach or Suggest a Broadcast Content Distribution System that Includes Layer 2 Switches and Implements a Virtual Local Area Network for Distributing the Broadcast Content.

Independent Claims 1 and 5 are drawn to a broadcast content distribution system and a method for broadcast content distribution, respectively. As such, amended claim 1 includes, "a broadcast station operable to distribute, according to a predetermined schedule, broadcast content associated with a VLAN (Virtual Local Area Network) number" and "one or more receiving terminals including a Layer 2 interface, wherein the receiving terminals are operable to receive, according to the predetermined schedule, the broadcast content from one of the one or more Layer 2 switches by setting the Layer 2 interface to the VLAN number for a predetermined scheduled time period."

Amended claim 5 includes the steps of, "distributing, at a broadcast station, according to a predetermined schedule, broadcast content having an associated VLAN (Virtual Local Area Network) number," "receiving, at a Layer 2 switch, the broadcast content based on the VLAN number," and "transmitting, at a Layer 2 switch port, the broadcast content based on a correlation between a VLAN group assigned to the Layer 2 switch port and the VLAN number associated with the broadcast content." The broadcast content is then received by a receiving terminal

"according to the predetermined schedule, from the Layer 2 switch by setting a Layer 2 interface to the VLAN number associated with the broadcast content for a predetermined scheduled time period."

It will be recalled that the present invention provides an alternative approach to IP multicasting, and its associated numerous protocols and complicated routers. Claims 1 and 5 as amended are believed to be effective to prevent any unintended reading of those claims on conventional technology such as the Hawthorne publications or typical corporate intranet structures. In the invention, the use of Layer 2 switches and VLANs permits broadcast content distribution over the Internet without the need for the content to be addressed to individual subscribers, as in IP multicasting.

The system described in the Hawthorne publication provides no teaching, suggestion or implication of using VLAN technology to broadcast content via Layer 2 switches to receiving terminals that receive the broadcast content by setting the Layer 2 interface to the VLAN associated with the broadcast content for the predetermined scheduled broadcast time period. The Hawthorne publication is limited in teaching to a method and device for translating a Virtual Local Area Network identifier (VLAN ID), referred to in the present application as a VLAN number, at a network node. In this regard, the input or received VLAN ID is different from the outputted or transmitted VLAN ID. Each port interface of the network node is configured to

independently translate VLAN IDs. Performing VLAN translation on a per-port interface basis enables the entire range of VLAN ID values to be unique to each port interface. The use of VLAN ID translation enables the network nodes that implement conventional 802.1Q VLANs to be scaled beyond 4,096 unique VLANs. Hawthorne does not teach, suggest or imply that the translation method be used in connection with broadcast content received from a broadcast station, much less that the output of the translated method be received at receiving devices by those devices having set a Layer 2 interface to the VLAN associated with the broadcast content for the predetermined scheduled broadcast time period.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of independent claims 1 and 5. Claims 4, 8, 9 and 10 are believed to be allowable at least by virtue of their dependency from claims 1 and 5, respectively.

The Hawthorne Publication Does Not Teach or Suggest a Broadcast Content Distribution System that Includes Layer 2 Switches having Memory Means Operable to Store Received Broadcast Content.

Dependent claim 4 further specifies that at least one Layer 2 switch includes storage means for storing the received broadcast content associated with the VLAN number. Dependent claim 8 includes the step of storing, at the Layer 2 switch, the broadcast content. New dependent claims 9 and 10, which depend

from claims 4 and 8, respectively, further specify that the receiving devices download, on-demand, the stored broadcast content.

As previously noted the Hawthorne publication provides no teaching, suggestion or implication of using VLAN technology to broadcast content via Layer 2 switches to receiving terminals that receive the broadcast content by setting the Layer 2 interface to the VLAN associated with the broadcast content for the predetermined scheduled broadcast time period. The Hawthorne publication is drawn to a method and apparatus for translating VLAN IDs and, as such, does not address distribution of broadcast content. Thus, the Hawthorne publication does not teach, suggest or imply storage means at the Layer 2 switch that is operable to store the broadcast content for subsequent on-demand downloading by the receiving devices.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of dependent claims 4 and 8 and the allowance of newly added claims 9 and 10.

Conclusion

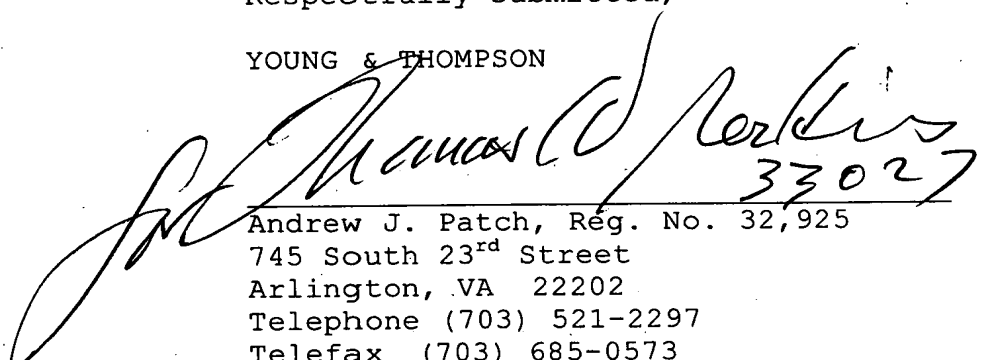
Therefore, all objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance and a Notice to that effect is earnestly solicited. Should any questions remain unresolved, the Examiner is encouraged to contact the undersigned

attorney for Applicants at the telephone number indicated below in order to expeditiously resolve any remaining issues.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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